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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/699,468

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Karen J. Smiley

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10/05/2006

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EXAMINER

PARDO, THUY N

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,468

Applicant(s)

SMILEY ET AL.

Examiner

Thuy N. Pardo

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,10-18,38 and 40-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-18,38 and 40-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Amendment file on July 21, 2006 in response to Examiner's Office Action has been reviewed. Claims 9, 19-37 and 39 have been canceled, claims 1, 8, 12, 16, 17 and 38 have been amended, and claims 40-44 have been added.
2. Claims 1-8, 10-18, 38 and 40-44 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-8, 10-18, 38 and 40-44 are rejected under 35 U.S.C. 102(a) as being anticipated by Apfelbaum et al. (Hereinafter "Apfelbaum") WO 00/072145 A1.

As to claim 1, Apfelbaum teaches the invention substantially as claimed, comprising:

comparing the data representing test results to predetermined criteria for the test results to determine whether the test results satisfy the predetermined criteria [comparing

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the determined paths through the model and the requirement expressions, see the abstract; page 6, lines 14-25; page 12, lines 10-24];

counting the number of the test results that do not satisfy the predetermined criteria [page 11, lines 12-22]; and

generating an indication that the transformer design needs further analysis if at least a predetermined quantity of the test results do not satisfy the predetermined criteria [generating a report based on the evaluation whether the determined paths through the model satisfy the requirement expressions, see the abstract; page 12, lines 10-24].

Apfelbaum does not explicitly teach displaying the indication on a display device although it has the same functionality of analyzing whether the model (or a transformer design) satisfies the requirement expression and generating a report based on the evaluating. However, these processes are implemented in the computer system [see page 7, lines 21-29]. Furthermore, since Apfelbaum also teaches that after the evaluation, the results are disposed on a computer readable medium [see page 7, lines 22], the feature of displaying the indication on a display device is inherent in the Apfelbaum's system.

As to claims 19, 38 and 27, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

As to claim 2, Apfelbaum teaches the invention substantially as claimed. Apfelbaum further teaches storing the data representing test results in the database [page 20, lines 10-23; page 17, lines 1-27].

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As to claim 3, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches storing the data representing test results in a plurality of tables in the database, each of the plurality of tables having the data representing test results for one particular type of test stored therein [page 17, lines 6-16].

As to claim 4, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches storing identifying data in the data base, the identifying data identifying at least one of a serial number, a design, and a design version of a particular one of the plurality of transformers from which a corresponding one of the data representing test results is obtained [page 17, lines 1-27; page 20, lines 10-23].

As to claim 5, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches that the predetermined criteria for the test results are stored in the database [inherent in the system, page 17, lines 17-27].

As to claim 6, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches at least one of a minimum, a maximum, a range, and a set of discrete values [page 18, lines 8 to col. 20, lines 7].

As to claim 7, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches the test results are results of acceptance testing [ab; 260-264 of fig. 13].

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As to claim 10, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches determining whether the data representing test results is at least one of: (i) greater than the minimum; (ii) less than the maximum; (iii) within the range; and (iv) substantially equal to at least one of the predetermined discrete values [targets totaled 75%, page 19, lines 26-29].

As to claim 11, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches that the test results are the results of at least one of the following tests: load loss; no-load loss; impedance; transformation ratio; turn to turn faults; high potential; double induced; impulse; heat run; sound level; short circuit; and tank pressure [ratio, page 15, lines 9 to col. 16, lines 5].

As to claim 12, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches sending the indication to a computing device [col. 11, lines 12-22].

As to claim 13, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches defining the database [page 17, lines 17-24].

As to claim 14, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches selecting the type of the test results included in the database [page 7, lines 4-15; page 20, lines 2-7].

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As to claim 15, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches selecting the predetermined criteria [page 11, lines 12-13].

As to claim 16, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches the predetermined quantity of the test results is a

predetermined numerical total [col. 11, lines 12-22].

As to claim 17, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches that the predetermined quantity of the test results is a

predetermined percentage of the test results [page 15, lines 22 to page 16, lines 5; pages 18-19; 264 of fig. 13].

As to claim 18, Apfelbaum teaches the invention substantially as claimed.

Apfelbaum further teaches selecting the predetermined criteria from the database based on at least one of one of the transformer design and a version of the transformer design [page 1, lines 19-25].

As to claims 8, 38 and 40-43, all limitations of these claim have been addressed in the analysis above, and these claims are rejected on that basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Apfelbaum et al. (Hereinafter "Apfelbaum") WO 00/072145 A1 and further in view of Miyamoto US Patent No. 6,304,095.

As to claim 44, Apfelbaum teaches the invention substantially as claimed. Apfelbaum further teaches determining that the certain transformer design over-performs if the retrieved test results consistently exceed the retrieved criteria [page 18, lines 15-19]. However, Apfelbaum does not explicitly teach modifying the certain design to reduce the cost of components required by the transformer design. Examiner notes that the feature "to reduce the cost of the components" is just a consequent result of the action "modifying the design". The feature of modifying the design in order to get different benefits based on the user's desires. Miyamoto teaches [see the abstract; fig. 5, 9; col. 5, lines 1-58].

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add the feature of Miyamoto to the system of Apfelbaum as an essential means to reduce time and cost [see Miyamoto, col. 5, lines 40-58].

Response to Arguments

Applicant's arguments filed July 21, 2006 have been fully considered but they are not persuasive.

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In response to applicant's arguments, the recitation "using data representing test results for a plurality of transformers" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicant argues that Apfelbaum concerns with analyzing a finite state machine model and not a design for a device, such as a transformer. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a design for a device) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that Apfelbaum fails to teach a method or computing system for evaluating a transformer design, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

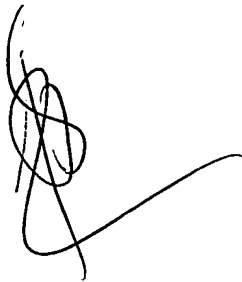
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 28, 2006

A handwritten signature in black ink, consisting of a series of loops and a long, sweeping tail that extends to the right.

THUY N. PARDO
PRIMARY EXAMINER